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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Kari Juppi

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EXAMINER

HUG, ERIC J

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/601,751	JUPPI ET AL.	
	Examiner	Art Unit	
	Eric Hug	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations "the broke treatment", "the following section", "the cut of the broke web", "the edge opposite to the cut of the broke web", and "the cutting point". There is insufficient antecedent basis for these limitations in the claim. Also regarding claim 1, the phrase "travelling in a controlled manner" is indefinite, because it is unclear what is meant by "controlled manner".

Also regarding claim 1, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte*

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Steigewald, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation 'at least during the widening operation', and the claim also recites 'preferably also prior to the widening operation' which is the narrower statement of the range/limitation.

Claim 3 recites the limitations "the full-width web ", " the selected dryer", "the broke web edge", and "the cutting point". There is insufficient antecedent basis for these limitations in the claim. Also regarding Claim 3, the phrase " typically to a pulper located underneath" renders the claim indefinite because it is unclear whether the limitation following the phrase "typically" is part of the claimed invention.

Claim 5 recites the limitation "the first nozzle". There is insufficient antecedent basis for this limitation in the claim.

Claim 6 and 7 recite the limitation "the opening gap". There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the straight section of the web ". There is insufficient antecedent basis for this limitation in the claim.

The other claims depend from claim 1 or claim 3.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Sollinger et al (US 5,600,897). Sollinger discloses a ropeless tail threading device for threading a web into single-tier and double-tier dryer sections of a paper machine. Initially the web is brought to the end of the press section or to the first dryer cylinder of the dryer section. From there it passes downwards into a broke pulper. A narrow edge strip, a tail, is cut and separated from the edge of the web. The tail is passed through the remainder of the dryer section(s). During threading, the tail is detached from the dryer cylinders by means of a scraper and air-blow nozzle. Once the tail has threaded the dryer sections, it is to spread to the full width of the web. Transfer suction rolls (also known in the art as reversing rolls) are provided between dryer cylinders. These transfer suction rolls provide suction to the drying wire, and the tail, which is on the other side of the drying wire, adheres to the drying wire. To assist in the transfer of the tail, edge suction chambers (suction boxes) are provided with the suction transfer rolls in order to provide high vacuum in the vicinity of the tail.

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Sollinger as described above reads directly on the steps of the method claims 1 and 2, namely guiding the web over the first drying cylinder to broke treatment, cutting the web to form a tail, guiding the tail from the drying cylinder through the rest of the drying section, then widening the tail to full width, whereby during the cutting operation, the blowing air separates the tail from the rest of web. The separation is the same as forming an open draw between the edge of the tail and the edge of the rest of the web. Sollinger as described above also reads on the elements of the claimed device (claims 3, 6, and 9), namely the cutter, elements for guiding the tail forward, elements for removing the broke web, elements for widening the tail, blow equipment provided after the cutter which separates the formed tail from the rest of the web (the broke web), and an adjustable cross-machine direction suction box along the suction roll between adjacent drying cylinders. The blow equipment is located along the straight path of the web between the first drying cylinder and the first reversing roll. Regarding claims 7 and 8, the blow equipment includes the air blow devices provided on the scraper 76 (indicated by arrows in Figure 5), air blow nozzle 79 which guides the tail/web to the drying wire, the air nozzles provided with short tail scraper 98 for acting on the region of the tail, and air blow nozzles 77. See column 7, lines 20-30 and 52-58, and Figure 5.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sollinger in view of Caspar (US 6,001,219) and Beisswanger et al (US 2002/0053414).

Regarding claim 3, as described above, Sollinger discloses a ropeless tail threading device for threading a web into single-tier and double-tier dryer sections of a paper machine. Initially the web is brought to the end of the press section or to the first dryer cylinder of the dryer section. From there it passes downwards into a broke pulper. A narrow edge strip, a tail, is cut and separated from the edge of the web. The tail is passed through the remainder of the dryer section(s). During threading, the tail is detached from the dryer cylinders by means of a scraper and air-blow nozzle. Once the tail has threaded the dryer sections, it is to spread to the full width of the web. Transfer suction rolls are provided between dryer cylinders. These transfer suction rolls provide suction to the drying wire, and the tail, which is on the other side of the drying wire, adheres to the drying wire. Sollinger discloses the cutter, elements for guiding the tail forward, elements for removing the broke web, elements for widening the tail, and blow equipment provided after the cutter which separates the formed tail from the rest of the web (the broke web). The blow equipment includes the air blow devices provided on the scraper 76 (indicated by arrows in Figure 5), air blow nozzle 79 which guides the tail/web to the drying wire, the air

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nozzles provided with short tail scraper 98 for acting on the region of the tail, and air blow nozzles 77. See column 7, lines 20-30 and 52-58, and Figure 5. Sollinger does not disclose the angles at which the air blow nozzles are set relative to the perpendicular of the web or to the web running direction.

However, the use of air to direct a cut strip away from a web using an angled blast of air is well known in the art as exemplified by Caspar, who discloses a water jet edge trimmer in a paper machine. Water jet cutter 28 directs water along axis 48 to cut the web longitudinally as it moves past. Air nozzle 75 directs the trimmed web away into a trim chute. As can be seen in the figures, the air nozzle is directed at an acute angle relative to the perpendicular and web running directions in order to facilitate removal of the trimmed edge from the rest of the web. The use of air at an opposing angle to direct the edge of a cut strip away from the rest of the web is also exemplified by Beisswanger. [Beisswanger qualifies as prior art under 35 U.S.C. 102(e)]. Beisswanger disclose an apparatus for forming and transferring a strip of web material. The apparatus includes two separate elements for forming the strip and separating the strip from the web. Figure 1 shows explicitly the use of air jets (29) directed at an angle to direct the cut strip away from the rest of the web. See also paragraph [0036]. Therefore, at the time of the invention, it would have been obvious to one skilled in the art to direct the air blow nozzles at an angle relative to the perpendicular of the web and relative to the web travel direction in order to separate the tail from the rest of the web and direct it towards the drying felt without carrying along the broke portion of the web. As for the specific claimed angles, it would have been obvious to vary the angle of impingement for optimal tail transfer and arrive at the claimed angles.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Pope (US 1,279,756) discloses a process for forming a narrow lead strip from a web using a water nozzle 6 for cutting the strip, and then using opposed air jet blasts directed at the edges of the strip for separating it from the rest of the web and directing it in the desired direction.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is 571 272-1192. The examiner can normally be reached on Monday through Friday, 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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